Introduction to:

2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults

BLUF:

-Shift from targeting LDL-C levels (ATP III), to treating with appropriately dosed statin therapy.

-Its more important to make sure your patient is treated with the appropriate statin and dose, than to a specific LDL goal.

-The relative reduction in ASCVD risk from statin therapy is related to the percentage by which LDL–C is lowered – not the LDL level achieved.

Problems with LDL-C Targeting

- RCT’s tell us optimal dosing for various statin medications that have been shown to reduce **ASCVD** (atherosclerotic cardiovascular) events.
- LDL–C targeting may result in treating with less than the optimal statin dose if your patient’s LDL is already at an LDL goal (ATP III), thus not achieving maximal ASCVD risk reduction.
- Many non-statin drugs are not shown to reduce ASCVD events in RCTs even though the drug may additionally lower LDL–C.
- Adding a non-statin therapy to achieve a specific LDL target may result in down-titration or using less than optimal dose of statin.

4 Statin Groups with the Most Benefit

- **I.E.** In which the potential for an ASCVD risk reduction benefit clearly exceeds the potential for adverse effects.

1. **Individuals with clinical ASCVD** d*efined by:*
   - *Acute* coronary syndromes, or
   - a history of MI, stable or unstable angina, coronary or other arterial revascularization.
   - stroke, TIA, or peripheral arterial disease presumed to be of atherosclerotic origin.
2. **Individuals with primary elevations of LDL–C ≥190 mg/dL**
3. **Individuals 40 to 75 years of age with diabetes with LDL-C 70-189 mg/dL**
4. **Individuals without clinical ASCVD or diabetes, who are 40 to 75 years of age with LDL-C 70-189 mg/dL and an estimated 10-year ASCVD risk of 7.5% or higher**

Our Patient Population

- For the ***primary*** **prevention** of ASCVD in individuals **without** clinical ASCVD and **with** LDL–C 70 to 189 mg/dL (age 40-70):
  - estimated absolute *10-year risk of ASCVD (defined as nonfatal MI, CHD death, nonfatal and fatal stroke)* should be used to guide the initiation of statin therapy.
  - The 10-year ASCVD risk should be estimated using new Cohort Equations.
  - **an estimated 10-year ASCVD risk of 7.5% or higher**
- Treat all individuals with primary elevations of LDL–C ≥190 mg/dL

- **Estimated 10-year ASCVD risk ≥7.5%** — Data has shown that statins used for primary prevention have **substantial ASCVD risk reduction benefits across the range of LDL–C levels of 70-189 mg/dL.**
- Moreover, RCT evidence confirms that primary prevention with statins reduces **total mortality** as well as **nonfatal ASCVD events**.

Statin "Intensity"

- The Expert Panel defines the intensity of statin therapy on the basis of the average expected LDL–C response to a specific statin and dose.
- Classifying specific statins and doses by the percent reduction in LDL–C level is based on evidence that **the relative reduction in ASCVD risk from statin therapy is related to the <u>percentage</u> by which LDL–C is lowered – not the LDL level achieved**.

'Intensity' Categories by Percent Reduction of LDL

Table 5. High- Moderate- and Low-Intensity Statin Therapy (Used in the RCTs reviewed by the Expert Panel)*

High-Intensity Statin Therapy	Moderate-Intensity Statin Therapy	Low-Intensity Statin Therapy
Daily dose lowers LDL–C on average, by approximately ≥50%	Daily dose lowers LDL–C on average, by approximately 30% to <50%	Daily dose lowers LDL–C on average, by <30%
Atorvastatin (40†)–80 mg **Rosuvastatin 20 *(40)* mg**	**Atorvastatin 10 *(20)* mg** **Rosuvastatin (5) 10 mg** **Simvastatin 20–40 mg‡** **Pravastatin 40 *(80)* mg** **Lovastatin 40 mg** *Fluvastatin XL 80 mg* **Fluvastatin 40 mg bid** *Pitavastatin 2–4 mg*	*Simvastatin 10 mg* **Pravastatin 10–20 mg** **Lovastatin 20 mg** *Fluvastatin 20–40 mg* *Pitavastatin 1 mg*

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Figure 2. Major recommendations for statin therapy for ASCVD prevention

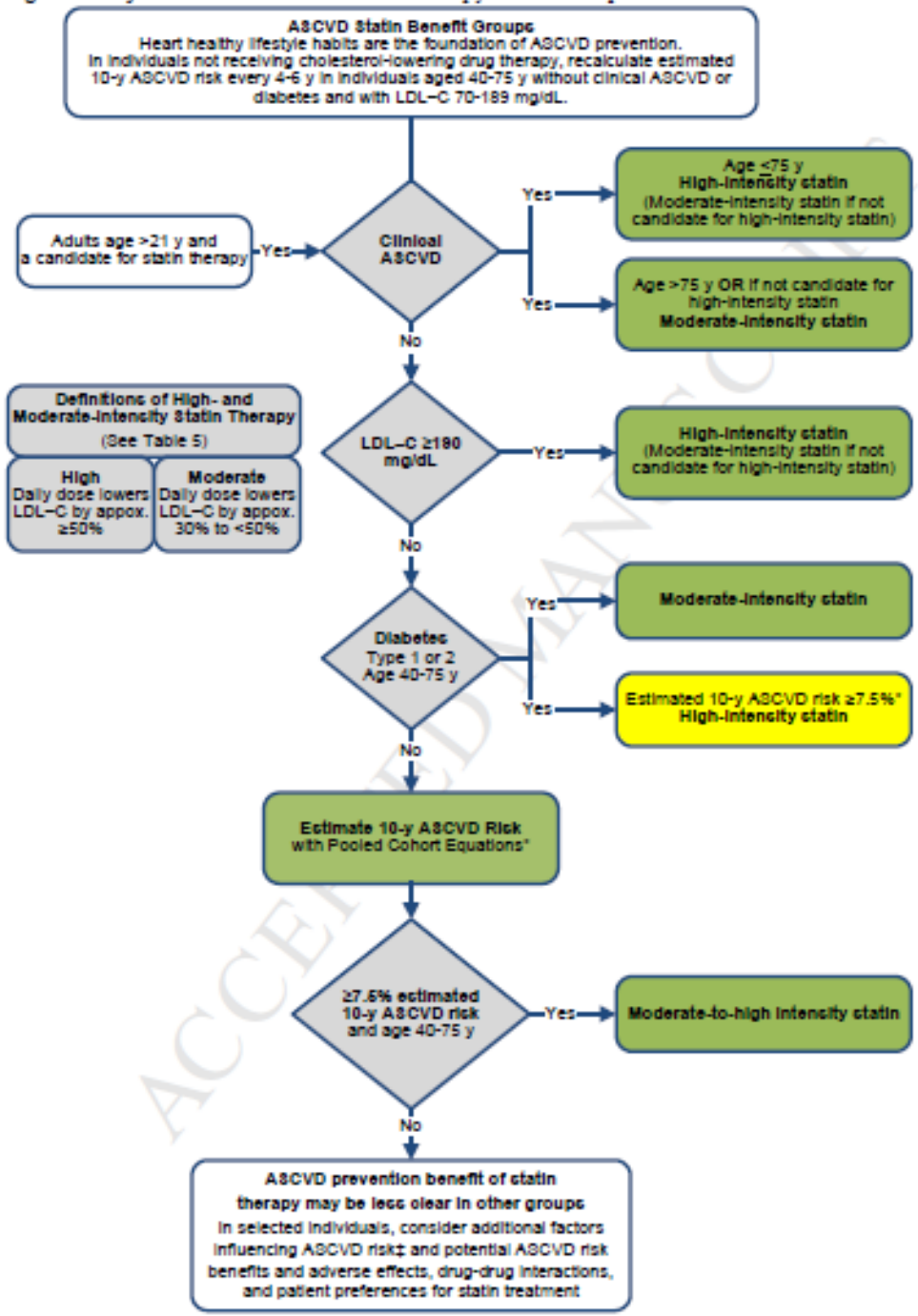
ASCVD Statin Benefit Groups
Heart healthy lifestyle habits are the foundation of ASCVD prevention.
In individuals not receiving cholesterol-lowering drug therapy, recalculate estimated 10-y ASCVD risk every 4-6 y in individuals aged 40-75 y without clinical ASCVD or diabetes and with LDL–C 70-189 mg/dL.
Adults age >21 y and a candidate for statin therapy
Yes
Clinical ASCVD
Yes
Age ≤75 y
High-intensity statin
(Moderate-intensity statin if not candidate for high-intensity statin)
Yes
Age >75 y OR if not candidate for high-intensity statin
Moderate-intensity statin
No
Definitions of High- and Moderate-Intensity Statin Therapy
(See Table 5)
High
Daily dose lowers LDL–C by appox. ≥50%
Moderate
Daily dose lowers LDL–C by appox. 30% to <50%
LDL–C ≥190 mg/dL
Yes
High-intensity statin
(Moderate-intensity statin if not candidate for high-intensity statin)
No
Diabetes
Type 1 or 2
Age 40-75 y
Yes
Moderate-intensity statin
Yes
Estimated 10-y ASCVD risk ≥7.5%*
High-intensity statin
No
Estimate 10-y ASCVD Risk with Pooled Cohort Equations*
≥7.5% estimated 10-y ASCVD risk and age 40-75 y
Yes
Moderate-to-high intensity statin
No
ASCVD prevention benefit of statin therapy may be less clear in other groups
In selected individuals, consider additional factors influencing ASCVD risk‡ and potential ASCVD risk benefits and adverse effects, drug-drug interactions, and patient preferences for statin treatment

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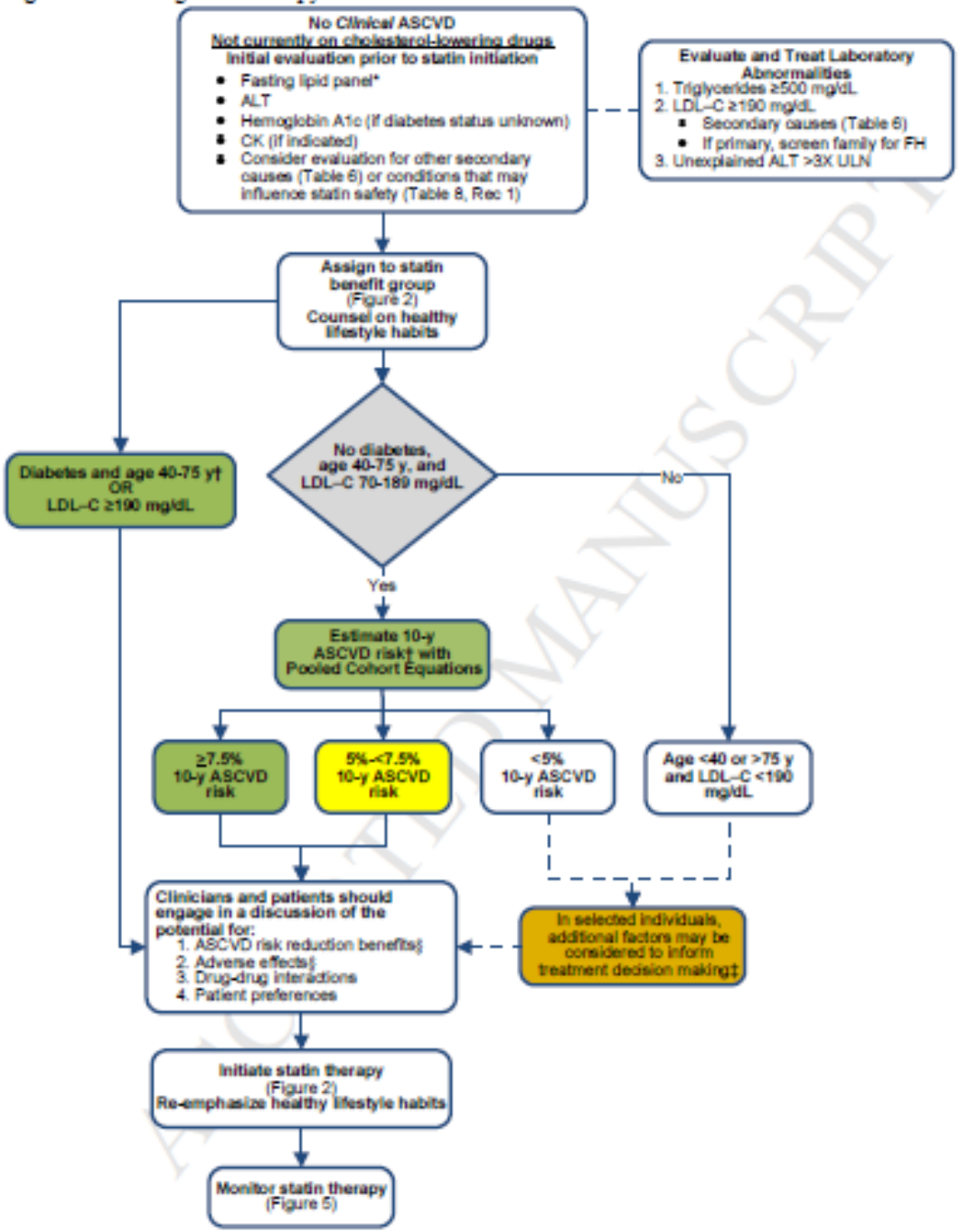
Figure 4. Initiating statin therapy in individuals *without clinical* ASCVD


No Clinical ASCVD
Not currently on cholesterol-lowering drugs
Initial evaluation prior to statin initiation
Fasting lipid panel*
ALT
Hemoglobin A1c (if diabetes status unknown)
CK (if indicated)
Consider evaluation for other secondary causes (Table 6) or conditions that may influence statin safety (Table 8, Rec 1)
Evaluate and Treat Laboratory Abnormalities
1. Triglycerides ≥500 mg/dL
2. LDL–C ≥190 mg/dL
Secondary causes (Table 6)
If primary, screen family for FH
3. Unexplained ALT >3X ULN
Assign to statin benefit group (Figure 2)
Counsel on healthy lifestyle habits
Diabetes and age 40-75 y† OR LDL–C ≥190 mg/dL
No diabetes, age 40-75 y, and LDL–C 70-189 mg/dL
No
Yes
Estimate 10-y ASCVD risk‡ with Pooled Cohort Equations
≥7.5% 10-y ASCVD risk
5%–<7.5% 10-y ASCVD risk
<5% 10-y ASCVD risk
Age <40 or >75 y and LDL–C <190 mg/dL
Clinicians and patients should engage in a discussion of the potential for:
1. ASCVD risk reduction benefits§
2. Adverse effects§
3. Drug-drug interactions
4. Patient preferences
In selected individuals, additional factors may be considered to inform treatment decision making‡
Initiate statin therapy (Figure 2)
Re-emphasize healthy lifestyle habits
Monitor statin therapy (Figure 5)

Additional Information

- Controversy over whether calculators over-estimate ASCVD risk in certain populations, thus resulting in over prescribing of statins.

- 2013 ACC/AHA Guidelines will be posted on IDC website
- Risk Calculator (Excel) will also be posted on IDC website

http://www.public.navy.mil/surfor/Pages/idcorpsmen.aspx

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Clinic: (619) 556-8069 Office: (619) 556-5191 Email Address mrd_sd_gmo@navy.mil
What's New
SAFE Training: Ensure you have completed training (Page 13 for DVD completion and for Passing Quiz, SAFE Kits onboard). Contact your physician supe immediately for guidance if you have not completed this CNO level training!
Physicals Clinic New Business Rules: Appointments Only Starting 18Sep! New screening process: all paperwork must be submitted to CDR Lake for screening by Monday at noon for the week your sailor has an appt at physicals clinic. Appts will be made between 1300 and 1530. Contact your physician supe for more details. The New Coversheet must accompany your packet and be given to CDR Lake for review (Questions: Vennessa.lake@navy.mil or 556-1457): Media: Cover Sheet.docx
Dermatology Clinic at MRD has started, 6 patients per clinic needed! Contact LCDR Brainard at tamara.brainard@navy.mil to get your patients in!
CME credit available! (passcode only available at Waterfront Meeting, contact LT Gilman at luke.gilman@navy.mil for more info)
UP TO DATE DVD's available now from your Physician Supe (can be used without an internet connection!)
Wanted: Tobacco cessation facilitators. Contact LCDR Wilkes at jennifer.wilkes@med.navy.mil
Mind-Body-Medicine Link (Contact LT Etim for more details)
Quick Reference
MRD Clinic and Office Phone Numbers: clinic: (619) 556-8069 office: (619) 556-5191, MRD Email Address: mrd_sd_gmo@navy.mil
Sleep Questionnaire: Sleep Questionnaire
MRD Clinic Schedule: Media: November Calendar.pdf
CNSRW Ship locator
Fleet Liaison Contact Info: Daytime Office Phone #: 619-532-6430, Fax # 619-532-6404, Duty Phone #: 619-441-3116, email: fmlo-list@med.navy.mil
Welcome guide for new IDCs: Media:Welcome_to_Medical_Readiness_Division_Sep13.pdf
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